1. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-5x - 10 > -4x - 7$$

   A. (a, ∞), where $a \in [-3, -1]$

   B. $(-\infty, a)$, where $a \in [1, 4]$

   C. (a, ∞), where $a \in [2, 13]$

   D. $(-\infty, a)$, where $a \in [-9, -1]$

   E. None of the above.

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2. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-3 + 6x < \frac{26x + 8}{4} \leq 8 + 5x$$

   A. $[a, b)$, where $a \in [6, 10.5]$ and $b \in [-6, -3]$

   B. $(-\infty, a) \cup [b, \infty)$, where $a \in [9, 16.5]$ and $b \in [-4.5, -3]$

   C. $(-\infty, a] \cup (b, \infty)$, where $a \in [6.75, 15]$ and $b \in [-9.75, -1.5]$

   D. $(a, b]$, where $a \in [8.25, 15]$ and $b \in [-6, -3]$

   E. None of the above.

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3. Using an interval or intervals, describe all the x-values within or including a distance of the given values.

No less than 9 units from the number -9.

   A. $[-18, 0]$

   B. $(-18, 0)$

   C. $(-\infty, -18) \cup (0, \infty)$

   D. $(-\infty, -18] \cup [0, \infty)$

E. None of the above

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4. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-6 + 8x < \frac{37x + 7}{4} \leq -9 + 5x$$

A. $[a, b)$, where $a \in [4.5, 9]$ and $b \in [1.5, 7.5]$

B. $(-\infty, a] \cup (b, \infty)$, where $a \in [3.75, 7.5]$ and $b \in [1.5, 3.75]$

C. $(a, b]$, where $a \in [4.5, 7.5]$ and $b \in [0.75, 4.5]$

D. $(-\infty, a) \cup [b, \infty)$, where $a \in [3, 7.5]$ and $b \in [-0.75, 3]$

E. None of the above.

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5. Using an interval or intervals, describe all the x-values within or including a distance of the given values.

No less than 3 units from the number 5.

A. $(-\infty, -2) \cup (8, \infty)$

B. $(-2, 8)$

C. $[-2, 8]$

D. $(-\infty, -2] \cup [8, \infty)$

E. None of the above

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6. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$\frac{4}{4} - \frac{6}{8}x > \frac{4}{9}x - \frac{9}{5}$$

A. (a, ∞), where $a \in [-1.5, 4.5]$

B. (a, ∞), where $a \in [-3, 1.5]$

C. $(-\infty, a)$, where $a \in [-5.25, -2.25]$

D. $(-\infty, a)$, where $a \in [0, 5.25]$

E. None of the above.

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7. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-7 + 8x > 10x \text{ or } 9 + 5x < 7x$$

A. $(-\infty, a] \cup [b, \infty)$, where $a \in [-4.06, -2.92]$ and $b \in [4.46, 5.05]$

B. $(-\infty, a) \cup (b, \infty)$, where $a \in [-4.65, -3.6]$ and $b \in [2.25, 3.6]$

C. $(-\infty, a) \cup (b, \infty)$, where $a \in [-3.6, -2.4]$ and $b \in [3.52, 6.38]$

D. $(-\infty, a] \cup [b, \infty)$, where $a \in [-5.65, -4.13]$ and $b \in [3.42, 3.78]$

E. $(-\infty, \infty)$

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8. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$\frac{10}{8} - \frac{5}{2}x < \frac{4}{9}x - \frac{6}{3}$$

A. $(-\infty, a)$, where $a \in [-2.25, 0]$

B. $(-\infty, a)$, where $a \in [0, 3]$

C. (a, ∞), where $a \in [-1.88, -0.97]$

D. (a, ∞), where $a \in [1.05, 2.4]$

E. None of the above.

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9. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-9x - 9 < 4x + 5$$

A. $(-\infty, a)$, where $a \in [-2.6, -0.4]$

B. (a, ∞), where $a \in [-0.5, 1.63]$

C. (a, ∞), where $a \in [-1.14, -0.06]$

D. $(-\infty, a)$, where $a \in [-0.4, 2.9]$

E. None of the above.

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10. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$5 + 4x > 7x \text{ or } 8 + 5x < 6x$$

A. $(-\infty, a] \cup [b, \infty)$, where $a \in [-2.25, 6]$ and $b \in [3.75, 11.25]$

B. $(-\infty, a] \cup [b, \infty)$, where $a \in [-11.25, -5.25]$ and $b \in [-2.25, 0]$

C. $(-\infty, a) \cup (b, \infty)$, where $a \in [-9, -5.25]$ and $b \in [-3, 3]$

D. $(-\infty, a) \cup (b, \infty)$, where $a \in [0.75, 5.25]$ and $b \in [3.75, 9]$

E. $(-\infty, \infty)$
